

Title (en)

PROCESS FOR THE MANUFACTURE OF A SWEETENER BASED ON MILK AND A SWEETENER MANUFACTURED ACCORDING TO THE PROCESS

Publication

EP 0083325 A3 19841128 (EN)

Application

EP 82850235 A 19821118

Priority

- SE 8206009 A 19821022
- US 33452481 A 19811228

Abstract (en)

[origin: EP0083325A2] A process for the manufacture of a sweetener based on milk, in which lactose is hydrolysed while being transformed to glucose and galactose by means of a strongly acidic cation exchanger having a cross linking degree of between 5 and 10 % in a parallel flow of a lactose solution through a fixed bed of the strongly acidic cation exchanger, whereby the hydrolysis is run to a hydrolysing degree of 40-100 % at a temperature of 80-150 DEG C or preferably 90-120 DEG C and with a flow cycle speed of between 2 and 0,5 bed volumes per hour corresponding a cycle speed of transforming lactose to glucose and galactose of between 0,5 and 2 hours, whereupon the glucose-galactose product thereby obtained is cooled to a temperature of 10-20 DEG C and is withdrawn for direct use, for being temporarily stored or for being further treated. The dry matter content of the treated lactose is kept at 40 to at least 80% or preferably 50 to 60%. The invention also relates to a sweetener manufactured according to the process.

IPC 1-7

A23L 1/236; C13K 1/00

IPC 8 full level

C13K 1/00 (2006.01); **C13K 13/00** (2006.01)

CPC (source: EP)

C13K 1/00 (2013.01); **C13K 13/00** (2013.01)

Citation (search report)

- [Y] GB 1539278 A 19790131 - EXPRESS DAIRY FOODS CO LTD
- [A] US 4266027 A 19810505 - MULLER WERNER C, et al
- [A] US 2592509 A 19520408 - BLOCK RICHARD J
- [Y] THE AUSTRALIAN JOURNAL OF DAIRY TECHNOLOGY, June 1979, pages 53-59; R.D. MacBEAN et al.: "Heterogeneous acid catalysed hydrolysis of lactose with cation exchange resins"
- [A] CHEMICAL ABSTRACTS, vol. 85, 1976, page 393, no. 175740y, Columbus, Ohio, USA; T.O.R. HAGGETT: "The acid catalyzed hydrolysis of lactose using a cation exchange resin" & N.Z.J. DAIRY SCI. TECHNOL. 1976, 11(3), 176-179

Cited by

EP1958514A1

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI NL

DOCDB simple family (publication)

EP 0083325 A2 19830706; EP 0083325 A3 19841128; EP 0083325 B1 19870204; AU 550326 B2 19860320; AU 9181882 A 19830630; CA 1203115 A 19860415; DE 3275349 D1 19870312; ES 517877 A0 19830816; ES 8307900 A1 19830816; FI 72147 B 19861231; FI 72147 C 19870413; FI 824400 A0 19821221; FI 824400 L 19830629; IE 53762 B1 19890201; IE 822776 L 19830622; NO 157507 B 19871221; NO 157507 C 19880406; NO 824301 L 19830623; NZ 202634 A 19860221; PT 75963 A 19830101; PT 75963 B 19851004

DOCDB simple family (application)

EP 82850235 A 19821118; AU 9181882 A 19821221; CA 417243 A 19821208; DE 3275349 T 19821118; ES 517877 A 19821202; FI 824400 A 19821221; IE 277682 A 19821122; NO 824301 A 19821221; NZ 20263482 A 19821126; PT 7596382 A 19821209